

DOCUMENT RESUME

ED 056 372

88

EA 003 762

AUTHOR Weiss, Edmond H.; Ackerman, Jerry
TITLE STEP, Year 1, Final Report. Volume II: Setting Goals and Objectives.
INSTITUTION Government Studies & Systems, Philadelphia, Pa.; Trenton Board of Education, N.J.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
REPORT NO R-586-2
PUB DATE [Jun 71]
NOTE 64p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Citizen Participation; Community Surveys; *Educational Planning; Educational Programs; Objectives; Operations Research; Program Budgeting; *Program Planning; Systems Analysis; *Systems Approach

IDENTIFIERS Elementary Secondary Education Act Title III; ESEA Title III; *Planning Programming Budgeting Systems; PPBS; Trenton Public Schools

ABSTRACT

This volume concerns a procedure for setting the districtwide goals and objectives to be used in planning STEP (System for Trenton's Educational Planning.) The report contains the analysis of a Trenton community opinion survey conducted in March-April of 1971. One vital element of the analysis is the development of "indicators of quality"--a series of measures to provide the planning system with standards for evaluation in terms of cost-effectiveness. A related document is EA 003 761. (Author)

STEP
YEAR I FINAL REPORT
VOLUME II
SETTING GOALS AND OBJECTIVES

EDMOND H. WEISS
JERRY ACKERMAN

TABLE OF CONTENTS

	<u>Page</u>
MODEL FOR SETTING GOALS AND OBJECTIVES	
Introduction	II-1
Goals, Objectives, and Indicators	II-2
The Goal-Setting Model	II-4
Annual Revisions	II-7
Priorities	II-8
Benefits of the Model	II-10
THE TRENTON OPINION STUDY	II-13
Background of the Study	II-13
Design of the Opinionnaire	II-14
Analysis	II-16
Contingencies	II-16
The Return	II-17
Neighborhood Responses	II-18
Analysis of Racial Bias	II-20
General Biases in the Return	II-23
Results: Overall Sample	II-23
Results: Total Population vs. Teachers	II-28
Results: Spanish-Speaking Respondents vs. Total Population	II-30
Results: Parents vs. Non-Parents vs. Total Population . . .	II-32
Results: Men vs. Women vs. Total Population	II-34
Results: Age-Group Comparisons	II-36
Results: Educational Priority vs. No Educational Priority . .	II-38

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Results: Inter-Neighborhood Comparisons	II-40
Results: Priority of Community Concerns	II-42
INTERPRETATIONS AND RECOMMENDATIONS	II-45
Approach to Interpretation	II-45
Areas of Nearly Total Agreement	II-46
Differing Perceptions of Groups Within the Sample	II-48
Teachers	II-48
Spanish-Language Respondents	II-48
Parents vs. Non-Parents	II-49
Men vs. Women	II-49
Age Differences	II-49
Priority Differences	II-50
Race-Neighborhood Differences	II-50
Differences in Perceived Priorities	II-50
Conclusions	II-51
Implications for Policy and Planning	II-54
Candidate Indicators	II-55
Final Comment	II-57

LIST OF ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
II-1	Conceptualization of STEP Goal-Setting Model	II-5
II-2	Revising Goals	II-9
II-3	Trenton Community Opinionnaire Form	II-15

LIST OF TABLES

<u>Table</u>		<u>Page</u>
II-1	Number of Responses by Neighborhood; Percent of Response from Each Neighborhood; Sampling Fraction for Each Neighborhood	II-19
II-2	Estimated White, Non-White, and Total Population for Each Neighborhood (1970 Census)	II-21
II-3	Question #1: Ranking for all Respondents	II-24
II-4	First and Fourth Quartile Mean Ratings for Those Respondents Expressing an Opinion	II-25
II-5	Items Most Frequently Responded to in the Overall Population (80% or More)	II-26
II-6	Ranking of Items in Question 2 by Frequency of Response in Total Sample	II-27
II-7	Comparison of Evaluative Rankings for Total Sample and Teachers (n = 270)	II-29

LIST OF TABLES (Continued)

<u>Table</u>		<u>Page</u>
II-8	Comparative Rankings for Total Sample and Respondents to Spanish Language Version (n = 50) . . .	II-31
II-9	Comparison of Evaluative Rankings for Total Population, Parents (n = 2,631) and Non-Parents (n = 383)	II-33
II-10	Comparison of Evaluative Rankings for Men (n = 704), Women (n = 2,306), and Total Population	II-35
II-11	Comparison of Evaluative Ratings for Age Groups 18-25 (n = 472), 26-35 (n = 1,113), 36-45 (n = 816), and 46 and Over (n = 384)	II-37
II-12	Comparison of Evaluative Ranking by Educational Priority Group (n = 769) and No Educational Priority Group (n = 1,226)	II-39
II-13	Comparison of Evaluative Ranking for Neighborhoods C, D, K, L, and Spanish-Language Sample	II-41
II-14	Comparison of Priority Concern Rankings, by Neighborhood	II-43
II-15	Worst-Rated Descriptors of the Trenton Schools	II-47
II-16	Best Rated Descriptors of the Trenton Public Schools. . .	II-47
II-17	Most Significant Descriptors (Satisfying Both Criteria)	II-53
II-18	Descriptors of Secondary Significance (Satisfying one Criterion)	II-53

MODEL FOR SETTING GOALS AND OBJECTIVES

GOAL SETTING MODEL

INTRODUCTION

It is important to distinguish between two sets of activities:

- a. those procedures which recur regularly as part of the planning cycle
- b. those procedures that are performed only once, as part of the basic research and development required to design and install the PPB System

As might be expected, the second type of activities, the one-time-only research and development type, tends to be more complex, time-consuming, and expensive than the first type of activities. It is the second kind of activities that typifies the current Trenton Title III project.

The distinction between the two types of activities is often most confusing when discussing goal-setting procedures. The problem of developing strategic goals and objectives for a school district for the first time is quite different from the annual problem of deciding whether, and how, to revise those goals and objectives. Indeed, it is contemplated that once the system is "up and running," the Board of Education and the district's planning staff will be able to review and revise goals and objectives in only a few days.

The content of this section of the report is devoted to the research and development problem, the procedures required for setting goals and objectives for the first time, and the procedures for revising those goals and objectives in the annual process. The approach to be recommended is intended to serve two needs that are characteristic of all agencies of government, namely:

responsiveness - sensitivity to the preferences and demands of the school district's constituency, so that policy-making is representative of the people affected by it

effectiveness — the smoothness, thoroughness, and completeness with which the district carries out its chartered responsibilities, within the constraints of economic rationality.

Although these two criteria for evaluating the performance of public agencies are sometimes in conflict, GSS believes that the approach outlined below addresses both needs in a satisfactory way.

GOALS, OBJECTIVES, AND INDICATORS

While almost every school district in America has some district-wide goals, virtually no district has goals which are appropriate for rational planning and decision-making; this problem is in part attributable to confusing definitions of the terms "goal" and "objective". There is little agreement on the meaning of these terms, and management scientists and educational theorists often contradict each other on whether it is "goals" or "objectives" that are supposed to be measurable.

In the Trenton PPB System (STEP), both goals and objectives are measurable. A goal is defined as a statement of intention to change some variable in a specific direction to a desired level; an objective is defined as the specific magnitude of change that is required to close the gap between the anticipated level and desired level. To illustrate, suppose that the planners estimate that by 1975, 55% of Trenton's High School graduates will be accepted to college; the policy makers might set as a goal raising the desired level to 65%, and thus, the district's objective is to close the gap between 55% and 65% by 1975.

The reason for this kind of specificity is that goals and objectives will be used to make resource allocation decisions. If, for example, it was decided to enhance or modify those programs that affect college placement rate, it would be extremely important to know whether the objective (the gap to be

closed) were 5% or 10%. It is unreasonable to expect the same application of resources to produce both ends, and it would be almost as unreasonable to develop programs that would exceed the desired level when money is scarce (as it always is) and when other objectives need to be met.

Thus, the policy-makers in a district which uses PPBS will be required to state goals and objectives in measurable, specific terms, to state desired levels and deadlines. They will also - as will be described later - be obliged to state priorities in equally specific terms.

To facilitate the stating (or revising) of goals and objectives, the STEP system employs Indicators of Quality. Indicators are scales - averages, ratios, proportions - that measure the success or failure of the district in achieving its goals. The set of approved Indicators is the barometer of educational effectiveness; it is used to assess current levels of effectiveness, forecast future levels of effectiveness, state desired levels (goals), or objectives (gaps between anticipated and desired levels). In strategic planning, Indicators describe the product or output of the organization; in computing the cost-benefit of a given plan, the sum of weighted changes on Indicator scales equals the expected benefit of the plan.

The problem, therefore, of estimating goals and objectives for the first time is a two-phase problem:

Phase I - Selecting the Indicators of Quality that will be used in the district

Phase II - Setting desired levels (goals) on those Indicators.

THE GOAL-SETTING MODEL

The Phase I objective - to develop the Indicator list that will be used - has been a major concern of Year 1 of the project. There are, of course, no "right" or "wrong" Indicators; it is within the policy-makers' power to choose them (and thereby exclude all others); nor is there a shortage of candidate Indicators, because hundreds could be generated easily. The research activity in Year 1 has generated data which will inform the Board of those Indicators that seem to matter most to the Trenton general community - and special sectors of it - so that the choice of Indicators (a policy prerogative) will be influenced by detailed data about community opinion.

The logic of this process is explained in the attached conceptualization of the goal-setting process (Figure II-1). The steps in the process are described below:

1) Establish School-Community Advisory Group

A group comprised of representatives of Trenton Community Agencies, Trenton Educators, and professional planning scientists was formed (the project's Technical Task Force); the mission of this group was to evaluate alternative technical approaches - including the goal-setting procedure - and communicate its judgements to the consultant contractor.

2) Generate Extended List of School Descriptors

A sub-committee of the Technical Task Force generated a list of approximately fifty descriptors of the school district's program, that is, aspects of the schools that the parents and general community would probably have opinions about. This list was revised and refined into 36 descriptors, which would serve as the basis of the community opinion study.

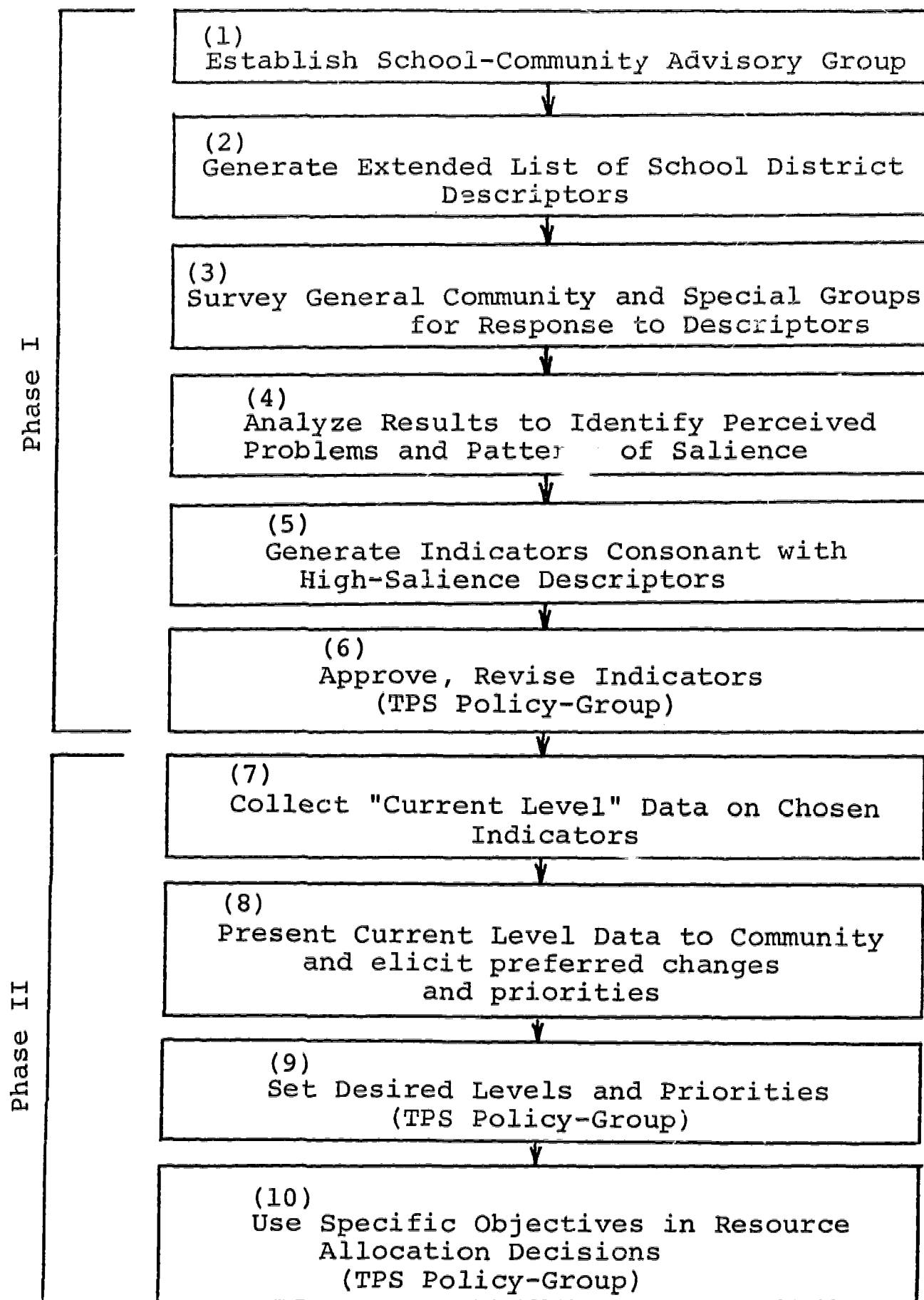


Figure II-1. Conceptualization of STEP Goal-Setting Model

3) Survey General Community and Special Groups, etc.

The consultant contractor, working with members of the task force, developed a community opinionnaire form; two committee members, United Progress, Inc., and Trenton Model Cities, translated and distributed a Spanish-language version of the form. The form was printed in Trenton's two daily newspapers, and a copy was sent home with every school child. The teaching staff of Trenton was also given an opportunity to respond.

4) Analyze Results, etc.

Government Studies and Systems then computed the results and analyzed the data; the focus of the analysis was on those descriptors which elicited the strongest positive and negative opinions from the respondents, and those which elicited the highest percentage of any response at all. Analyses were performed for the entire population and for many socio-economic sub-populations within the sample.

5) Generate Indicators, etc.

From the analysis of the data, candidate Indicators are extracted and forwarded to Trenton Public Schools' Policy-Makers. (Steps 3, 4, 5 are included in the remaining sections of this volume.)

6) Approve, Revise Indicators, etc.

In the beginning of Year 2, the Board and Executive administrators will revise, modify, or approve the candidate Indicators.

7) Collect "Current Level" Data, etc.

Given the approved set of Indicators, the Trenton Office of Planning, Research, and Evaluation will collect "current level" data, thereby

profiling the existing quality of the district in terms of those measures judged most meaningful to the community, staff, and Board of Education.

8) Present Current Level Data to Community, etc.

The profile data will be disseminated in a second community opinion survey (or other opinion-collecting process) and respondents will indicate the desired magnitude of change on the various Indicators and on the priorities.

9) Set Desired Levels, etc.

Given this report on current levels and community preferences, the Trenton Policy-Making group will issue a Policy Memorandum expressing the desired levels which will serve as district-wide goals, the time deadlines, and the priority weightings of the various goals.

10) Use Specific Objectives, etc.

This policy memorandum will be used to generate project designs and develop alternative plans in the STEP System (see Volume I, General Design Report).

ANNUAL REVISIONS

The proposed goal-setting model, it should be noted, is the model for first-time goals; this two-year program of research will not need to be repeated once the first policy memorandum is issued.

Each year, the Policy-Makers will issue a new policy memorandum - but only changes in the previously approved plan's objectives will be reported. How shall these changes be decided?

The two important influences on the annual goal-setting process are, first, the "base case" forecast (see Volume I) in which the multi-year implications of the currently approved plan are projected, and, second, the annual community input, which, ideally, should take the form of a scientifically designed survey, but can also be done less formally.

Thus, while the STEP system requires multi-year objectives, it allows for annual revision of goals and plans, thereby enhancing its responsiveness and flexibility.

The process of annual goal revision is conceptualized in Figure II-2. Note that this process occurs in the on-going system, and the Policy-Makers will already have a strategic plan from the previous year. If the forecasts developed in the earlier plan have proved accurate, and the desired levels have not changed, the Policy-Makers may elect to re-approve last year's plan, which means that a new "fifth year" will be added to it.

Priorities

"Priorities" is an overworked term in administrative discourse, but in STEP it has a limited and significant meaning.

Priority-judgments are reflected in the specific weighting of the several school district objectives. These judgments are expressed quantitatively in one of two forms:

- a. Weak form - the various objectives of the district (gaps to be closed) are ranked from most important to least important, and are roughly divided into High, Middle, and Low Priority.
- b. Strong form - the units of change on the various Indicators, or the total gap in the objective, are given specific relative weightings; for

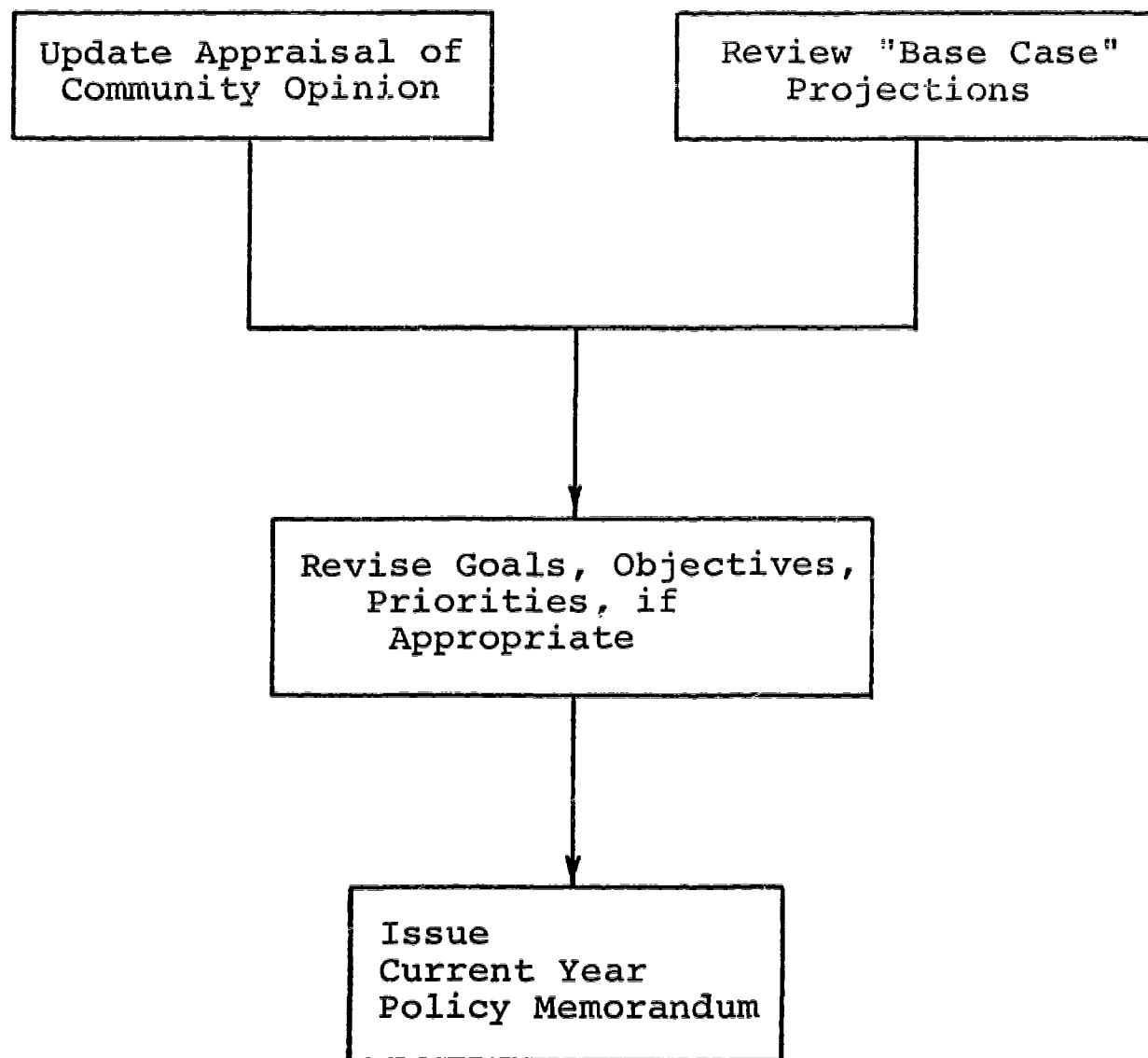


Figure II-2. Revising Goals

instance, the policy makers decide how many units of value - "utils" - will be associated with a "1% decrease in drop-out rate;" or a "1% increase in the number of students reading above grade level" (if those are two of the Indicators), or two of the objectives, such as a 1% decrease in drop-out rate" or "10% increase in students reading above grade level" are assigned relative importance.

The mathematical weights associated with the strong form (a form that will eventually be realized in STEP) are used to adjust the effect predictions of the various plans, so that a single estimate of expected benefit can be assigned to each alternative plan that is being considered. (See discussion of "Selecting the Best Case" in Volume I.)

Thus, "priority" becomes more than a word in discussing plans; it becomes a formal expression of the values and philosophy of the policy-makers (influenced by outside opinions), which, in turn, becomes mathematically binding upon plan selection and resource allocation decisions.

BENEFITS OF THE MODEL

The proposed goal-setting model in no way abridges the policy prerogatives of the Board and executive administrators; it does, in contrast, provide a framework for expressing the prevailing educational philosophy and values of TPS decision-makers in a specific, workable format, so that discussions of goals will be less rhetorical and more action-oriented; it also provides a rational framework for making the "go/no-go" decisions that are necessary in the scarce economy of the district.

The proposed approach also ensures community participation in the goal-setting process, and thus enhances the community's stake in the district's plans. The Policy-Makers should be cautioned, however, that failure to

incorporate the preferences of the persons consulted may have a negative effect on school-community relations.

This approach addresses both goals - responsiveness and effectiveness. The full range of advantages cannot be appreciated until the people who will use these procedures have 'hands-on' experience in framing policy memoranda (a Year 3 objective).

THE TRENTON OPINION STUDY

THE TRENTON OPINION STUDY

BACKGROUND OF THE STUDY

One of the important missions of the Trenton project has been to devise ways for the community to participate in the strategic planning process. Existing PPB systems -- particularly those at the federal level -- tend to be quite centralized, so that not only are large parts of the organizational staffs excluded from planning, but also the constituents and clients of the agency have little impact in setting goals and designing programs.

To overcome this deficiency in PPB, we determined to incorporate community inputs into two elements of the ongoing planning system (STEP), namely, the expression of goal preferences and the writing of "project designs" (see Volume I). We also determined that the community should play a role in the "first-time" goal development process, by helping define the educational descriptors that most mattered, so that these would be a basis for the selection of Indicators of Quality.

Several community participation procedures were considered and debated by the Steering Committee and Technical Task Force. The frequently used approach of forming issue analysis or goal-setting panels was rejected for several reasons, mainly because it is difficult to ensure representativeness in the group and because such groups typically find it impossible to differentiate educational ends and means -- a requirement for strategic planning. We judged that these issue analysis teams would be most useful after district goals were set, so that they might apply themselves to designing approaches to agreed-upon ends. It is presumed that the many existing community groups now working with the Trenton Public Schools will eventually help in that activity.

Therefore, instead of using a panel or blue-ribbon committee to develop goals, we elected to use the Technical Task Force to devise a survey procedure that would elicit a broader based sample of community opinion. Several survey procedures were proposed: door-to-door in-depth interviews were rejected because of problems of cost and interviewer reliability; a controlled sample of 400-600 telephone interviews was rejected, because people in the group were skeptical about the telephone as a medium and the sample size proposed.

The strategy finally developed, and approved by the Superintendent, was a community opinionnaire, disseminated widely in Trenton through the newspapers, community agencies, and school children. (See Figure II-3.)

Design of the Opinionnaire

The contents of the opinionnaire were determined by committee and by the Superintendent, under the supervision of GSS and with consultation from a survey research firm in Princeton. The descriptors under Question #1 were consolidated from a longer list, and subject to frequent revisions. Certain item wordings were contested and resolved by administrative fiat of the Superintendent.

One of the more problematical aspects of the design was the reluctance, by the administration, to allow questions about race or income to be included. The compromise solution to this problem was the map in Question #4, in which the city is divided roughly into racially, economically homogeneous groups (with some exceptions). The determination of the boundaries was made by educators in the Trenton Public Schools, with assistance from municipal planners in City Hall. It was known, from the beginning, that this would provide imperfect information about the socio-economic status of the respondents, but in order to avoid the use of potentially sensitive questions, the imperfect map technique was employed.

Trenton Community Opinionnaire

INSTRUCTIONS

PLEASE READ INSTRUCTION CAREFULLY

We are asking the citizens of Trenton to assist us in developing some priorities for the coming year. Your answers to this opinionnaire will help us in developing better educational programs for your children. Be as frank as you wish. YOU NEED NOT SIGN THE OPINIONNAIRE. Please answer all questions.

Any person, 18 years or older, who lives in the city of Trenton, is entitled to complete the opinionnaire. Please complete each form on an individual basis. Each member of the family should complete his own opinionnaire.

HOW TO RETURN YOUR OPINIONNAIRE

When you have completed filling out the opinionnaire you may return it in one of the three following ways:

1. Have your youngster return it to the school he or she attends.
2. Return the opinionnaire personally to any public school building in the city.
3. Mail the opinionnaire to---

Board of Education
9 South Stockton Street
Trenton, New Jersey 08609

Question #1

In this question, we are asking you to rate the following aspects of the Trenton Public Schools as being very good, good, average, bad, or very bad. If you have no opinion about the item, use that category description. Circle the number under the category of your rating.

	Very Good	Good	Average	Bad	Very Bad	No Opinion
Percentage of Students who Graduate	5	4	3	2	1	0
Guidance and Counseling	5	4	3	2	1	0
Safety and Security	5	4	3	2	1	0
Adult Education	5	4	3	2	1	0
School Libraries	5	4	3	2	1	0
School Lunch Programs	5	4	3	2	1	0
Learning Opportunities for Handicapped Children	5	4	3	2	1	0
Drug Education	5	4	3	2	1	0
School Buildings	5	4	3	2	1	0
Staff Attitudes	5	4	3	2	1	0
Recreation and Sports	5	4	3	2	1	0
Basic Skills Education	5	4	3	2	1	0
Discipline	5	4	3	2	1	0
Preparation for College	5	4	3	2	1	0
Reading and Language Arts	5	4	3	2	1	0
Class Size	5	4	3	2	1	0
Learning Opportunities for Pre-School Children	5	4	3	2	1	0
Job Opportunities for Members of the Community	5	4	3	2	1	0
Opportunities for Community Participation	5	4	3	2	1	0

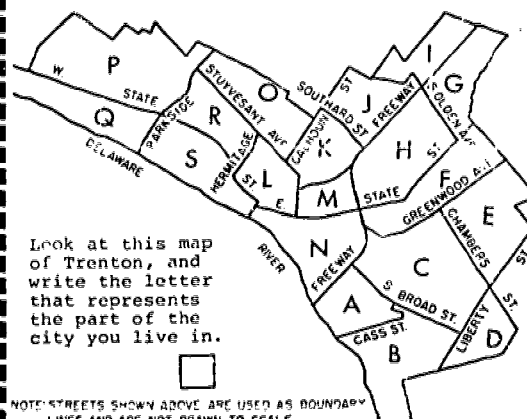
	Very Good	Good	Average	Bad	Very Bad	No Opinion
Citizenship and Social Studies Instruction	5	4	3	2	1	0
Student Health Services	5	4	3	2	1	0
Evening High School	5	4	3	2	1	0
Vocational Education	5	4	3	2	1	0
Learning Opportunities for Disadvantaged Children	5	4	3	2	1	0
Books, Supplies, Materials	5	4	3	2	1	0
Sex and Family Education	5	4	3	2	1	0
Consumer Education	5	4	3	2	1	0
Extra Curricular Activities for Students	5	4	3	2	1	0
Math-Science Education	5	4	3	2	1	0
The Way the District uses Money	5	4	3	2	1	0
Learning Opportunities for Spanish-speaking Children	5	4	3	2	1	0
Communication With Parents and Community	5	4	3	2	1	0
Attendance Levels	5	4	3	2	1	0
Teacher Ability	5	4	3	2	1	0
Student Preparation for Jobs	5	4	3	2	1	0
Relations among Students with Different Racial or Cultural Backgrounds	5	4	3	2	1	0

Question #2

What, in your opinion, are the two most serious concerns of people living in the City of Trenton? Put an "X" in the box next to the two most important concerns.

- ☐ Safety and Crime
- ☐ Taxes
- ☐ Health Care
- ☐ Environment and Pollution
- ☐ Housing
- ☐ Transportation
- ☐ Employment
- ☐ Education
- ☐ Recreation
- Other (specify) _____

Question #4



Look at this map of Trenton, and write the letter that represents the part of the city you live in.

NOTE: STREETS SHOWN ABOVE ARE USED AS BOUNDARY LINES AND ARE NOT DRAWN TO SCALE.

Question #3

Are you a parent? (circle one) Yes No

Do you have school age children? (circle one) Yes No

Write below the number of children who attend-

Trenton Public Schools _____

Private or Parochial Schools _____

Question #5

What is your sex? Male Female

What is your age? _____ years old

Question #6

If you could give one piece of advice to the Trenton Board of Education, what would it be?

Figure II-3. Trenton Community Opinionnaire Form

Analysis

There are no hypotheses to be tested in this study; the goal is, quite simply, to ascertain which of the educational descriptors proposed by the committee seem to matter most to persons in the community, so that Indicators may be generated appropriately. We are interested in knowing that information for the overall response group, and for special populations within that sample.

The interpretation of salient descriptors is based on two analyses:

- a. The absolute distance of the mean evaluative response from the "3" or average position on the scale
- b. The relative percentage of persons expressing any opinion at all (in the 1-5 range) about the descriptor, since there was considerable variation in the number of responses to each descriptor.

The actual evaluative rating on these descriptors is reported, and may be useful to Policy-Makers, but it is only of secondary interest in this study.

Question #2 is to provide a rough index of the relative priority of education among other concerns in the Trenton community. It is reported for the population and sub-populations, as information of general interest, and is also used as a reference variable in one analysis to assess differences between persons who do and do not indicate it as one of the two top priority issues.

Questions 3, 4, 5 are demographic reference variables, used to describe the population, analyze its components, and in certain analyses, correct for over- or under-representation of certain groups.

Contingencies

The survey is, of course, not the product of a representative sampling plan; those survey alternatives built on systematic sampling were rejected by

the Task Force. Technically, the sample of respondents is known as an "accidental" sample; although this term has perjorative connotations, we should remember that government officials are also elected by accidental samples (free elections). The return represents the opinions of those persons who were interested enough to respond; it is probably biased in favor of parents and civically-minded individuals; it is also probably biased against people who do not read well or feel that surveys are useless.

Also, there is no control on false responses or multiple-responding -- but these factors can be presumed to be randomly distributed across the population.

Because this is an accidental sample, it is premature to use this data as a precise measure of overall community sentiment, although, as will be shown later, there is good reason to believe that a more representative sample would produce few differences in the data. In order to assess some of the sampling biases, a special set of analyses are included below; these are based on approximate estimates of socio-economic factors in the community, but do help clarify what the biases of the sample may be.

The Return

Number of Respondents

Before the cut-off date, 3,107 persons responded to the survey. This total is the sum of:

General Community	<u>2,787</u>
Spanish-Language Version	<u>50</u>
Trenton School Staff	<u>270</u>
Total	<u><u>3,107</u></u>

Age of Respondents

Within this total population, for those who indicated their ages, they were as follows:

18-25	<u>472</u>
26-35	<u>1, 113</u>
36-45	<u>816</u>
46 - over	<u>384</u>
No response	<u>322</u>

Sex of Respondents

Male	<u>704</u>
Female	<u>2, 306</u>
No response	<u>97</u>

Parental Status

Parents	<u>2, 630</u>
Non- Parents	<u>383</u>
No response	<u>95</u>

Number of Parents with School-Aged Children	<u>2, 431</u>
Number of Parents with at least one child Enrolled in TPS	<u>2, 303</u>
Number of Parents with at least one child Enrolled in a Non-Public School	<u>255</u>

Neighborhood Responses

Table II-1 shows the distribution of responses by neighborhood. (2, 670 indicated their neighborhood in Question #4.) The table shows the proportion

TABLE II-1. NUMBER OF RESPONSES BY NEIGHBORHOOD; PERCENT OF RESPONSE FROM EACH NEIGHBORHOOD; SAMPLING FRACTION FOR EACH NEIGHBORHOOD

Neighborhood	Number Responding	Neighborhood Population	% of Total Population in Neighborhood	% of Responses From Each Neighborhood	Sampling Fraction (%) From Each Neighborhood
A	58	2884	2.8	2.2 (-)	2.0
B	208	7869	7.8	7.8 (=)	2.6
C	382	14312	14.2	14.3 (+)	2.7
D	77	4215	4.2	2.9 (-)	1.8
E	130	8000	7.9	4.9 (-)	1.6
F	250	6115	6.1	9.4 (+)	4.1
G	223	3309	3.3	8.4 (+)	6.7
H	80	7602	7.5	3.0 (-)	1.1
I	116	2767	2.7	4.3 (+)	4.2
J	160	4850	4.8	6.0 (+)	3.3
K	143	5133	5.1	5.4 (+)	2.8
L	114	4708	4.7	4.3 (-)	2.4
M	35	1947	1.9	1.3 (-)	1.8
N	40	6136	6.1	1.5 (-)	0.7
O	171	5807	5.8	6.4 (+)	2.9
P	99	2671	2.6	3.7 (+)	3.7
Q	58	3782	3.8	2.2 (-)	1.5
R	189	3803	3.8	7.1 (+)	5.0
S	137	4365	4.3	5.1 (+)	3.1
Total	2,670	100,835	100	100	Mean Sampling Fraction 2.84%

of the total population in each neighborhood -- estimated by overlaying a 1970 Census Tract Map on the Neighborhood Map -- and a comparison of the percentage of returns from each neighborhood and the percentage of the total population for each neighborhood. Finally, the table shows the sampling fraction for each neighborhood, that is, the percentage of all persons living in the neighborhood who responded to the opinionnaire.

Note that, of the 19 neighborhoods, 1 was represented in the return exactly proportionate to its population (B), while 8 were under-represented and 10 were over-represented.

Analysis of Racial Bias

Because the respondents were not asked to report their race, the most difficult analytical problem is to infer, from available neighborhood information, whether the response was biased toward white or non-white respondents.

To perform this analysis, the racial census data for each neighborhood was constructed, assuming uniform distribution of the races in each census tract; this assumption is, of course, incorrect, but it is reasonable to assume that errors of racial distribution will be randomly distributed across all neighborhoods. Persons familiar with the Trenton neighborhood structure will no doubt find data in the following table (Table II-2), which are contrary to their personal knowledge of the community. These errors, however, are randomly distributed across all neighborhoods, and, therefore, do not severely limit the analyses that follow.

Table II-2 shows the estimated population for each neighborhood, for white, non-white, and all persons.

TABLE II-2. ESTIMATED WHITE, NON-WHITE, AND TOTAL POPULATION
FOR EACH NEIGHBORHOOD (1970 CENSUS)

Neighborhood	White Population	Non-White Population	Total Population
A	1783	1101	2884
B	7703	166	7869
C	12591	1721	14312
D	4187	28	4215
E	6547	1453	8000
F	3501	2614	6115
G	806	2503	3309
H	2280	5321	7602
I	2329	438	2767
J	1842	3007	4850
K	1145	3988	5133
L	1088	3619	4708
M	945	1002	1947
N	3316	2820	6136
O	1847	3960	5807
P	2238	433	2671
Q	2748	1034	3782
R	1867	1937	3803
S	2247	2118	4365
<u>Trenton Total</u>	<u>62080</u>	<u>38755</u>	<u>100835</u>

Given the data in Table II-1, three correlation coefficients were computed:

- a. Correlation between responses from a neighborhood and total population of neighborhood
- b. Correlation between responses in a neighborhood and white population of the neighborhood
- c. Correlation between responses in a neighborhood and non-white population

The values of those correlation coefficients are:

<u>Treatment</u>	<u>r</u>
Total Population	0.8741
White Population	0.8352
Non-White Population	0.6403

Thus, the total population of a neighborhood is a better predictor of return from that neighborhood, than either the white or non-white population total.

To further amplify this analysis, a multiple correlation coefficient was computed, relating number of returns and both white and non-white population; this multiple correlation is compared to the total population correlation above:

<u>Treatment</u>	<u>r</u>
Total Population	0.8741
White, Non-White	0.8759 (Multiple-r)

Thus, the knowledge of white/non-white population in a neighborhood is not a significantly better predictor of the return from that neighborhood than a knowledge of the total neighborhood population. (The white/non-white factor accounts for only 0.002% more of the variance in neighborhood response rate than the total population.)

Thus, with a high degree of confidence, we can assert that the accidental sample is not significantly biased toward white or non-white respondents.

General Biases in the Return

We believe, therefore, that our sample is not significantly biased toward white or non-white respondents. There are, as the data in previous sections indicates, certain other apparent biases in the sample:

1. The 26-35 age group (parents of small children) are over-represented in the sample.
2. Women are over-represented in the sample.
3. Non-parents are under-represented in the sample.
4. Parents of children in the non-public schools are under-represented.

Thus, these results appear to over-represent, somewhat, the opinions of the mothers of Trenton Public School children. This should be viewed as a contingency in the interpretation of the results.

Results: Overall Sample

Table II-3 shows the mean rating of the thirty-six educational descriptors, and the percentage of persons expressing any opinion at all, for the entire population. In the evaluative scale used:

- 5 = Very good
- 4 = Good
- 3 = Average
- 2 = Bad
- 1 = Very bad

TABLE II-3. QUESTION #1: RANKING FOR ALL RESPONDENTS

Item	# Of Responses In Range 1-5	As A % Of Total In Grouping	Mean Value Of Responses In Range 1-5
Vocational Education	2153.	69.30	3.553
Evening High School	2056.	66.17	3.553
School Libraries	2646.	85.16	3.549
Learning Opportunities for Pre-School Children	2407.	77.47	3.490
Adult Education	2230.	71.77	3.412
Teacher Ability	2550.	82.07	3.410
Math-Science Education	2370.	76.28	3.380
School Lunch Programs	2760.	88.83	3.374
Student Health Services	2576.	82.91	3.359
Recreation and Sports	2638.	84.91	3.350
Basic Skills Education	2459.	79.14	3.222
Percentage of Students Who Graduate	2373.	76.38	3.191
Citizenship and Social Studies Instruction	2238.	72.03	3.188
Reading and Language Arts	2524.	81.24	3.145
Learning Opportunities for Handicapped Children	2233.	71.87	3.139
Preparation for College	2306.	74.22	3.134
Learning Opportunities for Disadvantaged Children	2345.	75.47	3.098
Staff Attitudes	2526.	81.30	3.048
Extra Curricular Activities for Students	2311.	74.38	3.024
Student Preparation for Jobs	2346.	75.51	3.009
Books, Supplies, Materials	2690.	86.58	3.007
Guidance and Counseling	2577.	82.94	2.977
Drug Education	2311.	74.38	2.952
Opportunities for Community Participation	2393.	77.02	2.947
Learning Opportunities for Spanish-Speaking Children	1987.	63.95	2.935
Consumer Education	1798.	57.87	2.924
Sex and Family Education	2113.	68.01	2.900
School Buildings	2734.	87.99	2.847
Job Opportunities for Members of the Community	2383.	76.70	2.838
Safety and Security	2729.	87.83	2.770
Attendance Levels	2400.	77.24	2.753
Communication with Parents and Community	2593.	83.46	2.692
Relations Among Students with Different Racial or Cultural Backgrounds	2486.	80.01	2.533
Class Size	2667.	85.84	2.509
Discipline	2653.	85.39	2.488
The Way the District Uses Money	2262.	72.80	2.290
#Of Questionnaires in Grouping: 3107.			

Table II-4 shows the top and bottom fourth of the evaluative rating; these items are the ones that received the strongest positive and negative response.

TABLE II-4. FIRST AND FOURTH QUARTILE MEAN RATINGS FOR THOSE RESPONDENTS EXPRESSING AN OPINION

<u>First Quartile</u>	
<u>Descriptor</u>	<u>Rating</u>
1. Vocational Education	3.553
2. Evening High School	3.553
3. School Libraries	3.549
4. Opportunities for Pre-School Children	3.490
5. Adult Education	3.412
6. Teacher Ability	3.410
7. Math-Science Education	3.380
8. School Lunch	3.374
9. Health Services	3.359
 <u>Fourth Quartile</u>	
<u>Descriptor</u>	<u>Rating</u>
28. School Buildings	2.847
29. Job Opportunities for Community	2.838
30. Safety and Security	2.770
31. Attendance Levels	2.753
32. Communication with Parents and Community	2.692
33. Relations Among Students with Different Backgrounds	2.533
Class Size	2.509
35. Discipline	2.448
36. The Way the District Uses Money	2.290

Table II-5 shows the most frequently answered items, and the percentage of the total sample that expressed any opinion at all about them.

TABLE II-5. ITEMS MOST FREQUENTLY RESPONDED TO IN THE
OVERALL POPULATION (80% OR MORE)

<u>Descriptor</u>	<u>Percentage of Response</u>
1. School-Lunch Programs	88.83
2. School Buildings	87.99
3. Job Opportunities for Community	87.33
4. Books, Supplies, etc.	86.58
5. Class Size	85.84
6. Discipline	85.39
7. School Libraries	85.16
8. Recreation and Sports	84.91
9. Communication with Parents, etc.	83.46
10. Guidance and Counseling	82.94
11. Health Services	82.91
12. Teacher Ability	82.07
13. Reading and Language Arts	81.24
14. Relations Among Students, etc.	80.01

Table II-6 shows the overall response to Question #2; it reports the ranking of the frequencies with which the items were cited by respondents.

TABLE II-6. RANKING OF ITEMS IN QUESTION 2 BY FREQUENCY OF RESPONSE IN TOTAL SAMPLE

<u>Item</u>	<u>No. of Responses</u>
Safety and Crime	1655
Taxes	1050
Education	867
Housing	793
Employment	514
Health Care	205
Environment	200
Recreation	80
Transportation	50
Other	50

(750 Respondents gave no response or an improper response to this question)

Results: Total Population vs. Teachers

Table II-7 shows the comparative evaluative rankings of the descriptors by the overall population and the teachers who responded. In this, and future, comparison tables, ranking is reported in terms of stanines, or ninths, with 9 = to the highest stanine and 1 = to the lowest stanine.

TABLE II-7. COMPARISON OF EVALUATIVE RANKINGS FOR
TOTAL SAMPLE AND TEACHERS (n = 270)

	Total Stanines	Teachers Stanines
Vocational Ed	9	9
Evening High School	9	9
School Libraries	9	8
Learning Oppor. for Pre-School, Etc.	9	7
Adult Education	8	8
Teacher Ability	8	8
Math-Science Ed.	8	8
School Lunch Programs	8	5
Student Health Services	7	9
Recreation and Sports	7	7
Basic Skills Ed.	7	6
Percentage of Students Who Graduate	7	6
Citizenship and Soc. Stud. Inst.	6	7
Reading and Language Arts	6	4
Learning Oppor. for Handicapped, Etc.	6	2
Prep. for College	6	8
Learning Oppor. for Disadvantaged, Etc.	5	3
Staff Attitudes	5	6
Extra Curricular Activities, Etc.	5	5
Stud. Prep. for Jobs	5	5
Books, Supplies, Etc.	4	4
Guidance and Counseling	4	5
Drug Ed.	4	3
Oppor. for Community Participation	4	7
Learning Oppor. for Spanish-Speaking, Etc.	3	2
Consumer Ed.	3	4
Sex and Family Ed.	3	2
School Buildings	3	4
Job Oppor. for Community, Etc.	2	6
Safety and Security	2	1
Attendance Levels	2	1
Communication with Parents, Etc.	2	3
Relations Among Students, Etc.	1	3
Class Size	1	2
Discipline	1	1
The Way District Uses Money	1	1

Results: Spanish-Speaking Respondents vs. Total Population

Table II-8 shows the evaluative ranking, in stanines, for the total sample and the respondents to the Spanish-version of the questionnaire.

The Spanish-language version inadvertently omitted the "Job Opportunities" item. Note also that all the thirty-five remaining items received a mean rating of 3.5 or higher; this small sample is the only group in the total return who responded this way, and the difference may be attributable to translation problems in the words "good" and "bad."

Despite these problems, Table I'-8 shows the comparative rankings (independent of the actual mean scores), for general descriptive purposes.

TABLE II-8. COMPARATIVE RANKINGS FOR TOTAL SAMPLE AND
RESPONDENTS TO SPANISH LANGUAGE VERSION (n = 50)

	Total Population Stanine	Spanish-Version Stanine
Vocational Ed.	9	5
Evening High School	9	4
School Libraries	9	9
Learning Oppor. For Pre-School, Etc.	9	8
Adult Education	8	8
Teacher Ability	8	4
Math-Science Ed.	8	9
School Lunch Programs	8	9
Student Health Services	7	8
Recreation and Sports	7	6
Basic Skills Ed.	7	1
Percentage of Students Who Graduate	7	7
Citizenship and Soc. Stud. Inst.	6	2
Reading and Language Arts	6	5
Learning Oppor. for Handicapped, Etc.	6	6
Prep. for College	6	7
Learning Oppor. for Disadvantaged, Etc.	5	8
Staff Attitudes	5	2
Extra Curricular Activities, Etc.	5	3
Stud. Prep. for Jobs	5	4
Books, Supplies, Etc.	4	7
Guidance and Counseling	4	6
Drug Ed.	4	7
Oppor. for Community Participation	4	2
Learning Oppor. for Spanish-Speaking, Etc.	3	9
Consumer Ed.	3	3
Sex and Family Ed.	3	5
School Buildings	3	3
Job Oppor. for Community, Etc.	2	X
Safety and Security	2	5
Attendance Levels	2	1
Communication with Parents, Etc.	2	3
Relations Among Students, Etc.	1	6
Class Size	1	1
Discipline	1	2
The Way District Uses Money	1	4

Results: Parents vs. Non-Parents vs. Total Population

Table II-9 shows the comparative evaluative rankings for parents, non-parents, and the total population.

TABLE II-9. COMPARISON OF EVALUATIVE RANKINGS FOR TOTAL POPULATION, PARENTS (n = 2, 631) AND NON-PARENTS (n = 383)

	Total Population Stanine	Parents	Non- Parents
Vocational Ed.	9	9	9
Evening High School	9	9	9
School Libraries	9	9	8
Learning Oppor. for Pre-School, Etc.	9	9	7
Adult Education	8	8	8
Teacher Ability	8	8	8
Math-Science Ed.	8	8	9
School Lunch Programs	8	8	6
Student Health Services	7	7	8
Recreation and Sports	7	7	9
Basic Skills Ed.	7	7	6
Percentage of Students Who Graduate	7	6	7
Citizenship and Soc. Stud. Inst.	6	6	7
Reading and Language Arts	6	6	6
Learning Oppor. for Handicapped, Etc.	6	7	3
Prep. for College	6	5	7
Learning Oppor. For Disadvantaged, Etc.	5	6	4
Staff Attitudes	5	5	5
Extra Curricular Activities, Etc.	5	4	6
Stud. Prep. for Jobs	5	5	5
Books, Supplies, Etc.	4	5	4
Guidance and Counseling	4	4	4
Drug Ed.	4	4	3
Oppor. for Community Participation	4	3	5
Learning Oppor. for Spanish-Speaking, Etc.	3	4	2
Consumer Ed.	3	3	5
Sex and Family Ed.	3	3	3
School Buildings	3	2	4
Job Oppor. for Community, Etc.	2	3	3
Safety and Security	2	2	2
Attendance Levels	2	2	1
Communication with Parents, Etc.	2	2	2
Relations Among Students, Etc.	1	1	2
Class Size	1	1	1
Discipline	1	1	1
The Way District Uses Money	1	1	1

Results: Men vs. Women vs. Total Population

Table II-10 shows the comparative rankings by men, women, and total population.

TABLE II-10. COMPARISON OF EVALUATIVE RANKINGS FOR MEN
(n = 704), WOMEN (n = 2,306), AND TOTAL POPULATION

	Total Population Stanines	Men Stanines	Women Stanines
Vocational Ed.	9	9	9
Evening High School	9	9	9
School Libraries	9	9	9
Learning Oppor. for Pre-School, Etc.	9	7	9
Adult Education	8	8	8
Teacher Ability	8	8	8
Math-Science Ed.	8	8	8
School Lunch Programs	8	7	8
Student Health Services	7	8	7
Recreation and Sports	7	9	7
Basic Skills Ed.	7	6	7
Percentage of Students Who Graduate	7	7	7
Citizenship and Soc. Stud. Inst.	6	7	6
Reading and Language Arts	6	5	6
Learning Oppor. for Handicapped, Etc.	6	5	6
Prep. for College	6	6	6
Learning Oppor. for disadvantaged, Etc.	5	6	5
Staff Attitudes	5	4	5
Extra Curricular Activities, Etc	5	6	4
Stud. Prep. for Jobs	5	4	5
Books, Supplies, Etc.	4	5	5
Guidance and Counseling	4	4	4
Drug Ed.	4	3	4
Oppor. for Community Participation	4	4	4
Learning Oppor. for Spanish-Speaking, Etc.	3	3	3
Consumer Ed.	3	3	3
Sex and Family Ed.	3	2	3
School Buildings	3	5	2
Job Oppor. for Community, Etc.	2	3	3
Safety and Security	2	1	2
Attendance Levels	2	2	2
Communication with Parents, Etc.	2	2	2
Relations Among Students, Etc.	1	1	1
Class Size	1	2	1
Discipline	1	1	1
The Way District Uses Money	1	1	1

Results: Age-Group Comparisons

Table II-11 shows the comparison of the evaluative rankings for the age groups in the sample. In this analysis, respondents are grouped into the following age categories:

18-25

26-35

36-45

46 and over

TABLE II-11. COMPARISON OF EVALUATIVE RATINGS FOR AGE GROUPS 18-25 (n = 472), 26-35 (n = 1, 113), 36-45 (n = 816), AND 46 AND OVER (n = 384)

	18-25 Stanine	26-35 Stanine	36-45 Stanine	46-over Stanine
Vocational Education	9	9	9	9
Evening High School	9	9	9	9
School Libraries	9	9	9	9
Learning Opportunities for Pre-School, Etc.	8	9	9	8
Adult Education	9	8	8	7
Teacher Ability	7	8	7	8
Math-Science Education	8	7	8	8
School Lunch Programs	7	8	8	7
Student Health Services	8	8	7	8
Recreation and Sports	8	7	8	9
Basic Skills Education	7	7	7	6
Percentage of Students who Graduate	7	5	7	7
Citizenship and Social Studies Instruction	6	6	6	6
Reading and Language Arts	6	6	6	5
Learning Opportunities for Handicapped, Etc.	5	7	6	5
Preparation for College	6	5	6	7
Learning Opportunities for Disadvantaged, Etc.	5	6	5	6
Staff Attitudes	4	6	5	3
Extra Curricular Activities, Etc.	6	3	5	6
Student Preparation for Jobs	4	5	5	3
Books, Supplies, Etc.	5	5	4	4
Guidance and Counseling	4	4	4	5
Drug Education	3	4	4	5
Opportunities for Community Participation	4	4	3	4
Learning Opportunities for Spanish-Speaking, Etc.	3	4	4	4
Consumer Education	5	3	3	2
Sex and Family Education	3	3	3	3
School Buildings	3	2	2	4
Job Opportunities for Community, Etc.	2	2	3	3
Safety and Security	2	2	2	2
Attendance Levels	2	3	2	1
Communication with Parents, Etc.	2		2	2
Relations Among Students, Etc.	1	1	1	1
Class Size	1	1	1	2
Discipline	1	1	1	1
The Way District Uses Money	1	1	1	1

Results: Educational Priority vs. No Educational Priority

Table II-12 shows the comparative evaluative ranking of the descriptors by persons who indicated "Education" as one of the two priority concerns in Question #2, and those who did not.

TABLE II-12. COMPARISON OF EVALUATIVE RANKING BY EDUCATIONAL PRIORITY GROUP (n = 769) AND NO EDUCATIONAL PRIORITY GROUP (n = 1, 226)

	Education Priority Stanine	No Educ. Priority Stanine
Vocational Ed.	9	9
Evening High School	9	9
School Libraries	9	9
Learning Oppor. for Pre-School, Etc.	9	9
Adult Education	8	8
Teacher Ability	7	8
Math-Science Ed.	8	8
School Lunch Programs	8	8
Student Health Services	8	7
Recreation and Sports	7	7
Basic Skills Ed.	7	7
Percentage of Students Who Graduate	6	6
Citizenship and Soc. Stud. Inst.	7	6
Reading and Language Arts	6	6
Learning Oppor. for Handicapped, Etc.	6	7
Prep. for College	5	5
Learning Oppor. for Disadvantaged, Etc.	5	6
Staff Attitudes	6	5
Extra Curricular Activities, Etc.	5	4
Stud. Prep. for Jobs	5	4
Books, Supplies, Etc.	3	5
Guidance and Counseling	3	4
Drug Ed.	4	4
Oppor. for Community Participation	4	3
Learning Oppor. for Spanish-Speaking, Etc.	3	5
Consumer Ed.	4	3
Sex and Family Ed.	3	3
School Buildings	2	3
Job Oppor. for Community, Etc.	4	2
Safety and Security	2	2
Attendance Levels	2	2
Communication with Parents, Etc.	2	2
Relations Among Students, Etc.	1	1
Class Size	1	1
Discipline	1	1
The Way District Uses Money	1	1

Results: Inter-Neighborhood Comparisons

The evaluative rankings of the items by each of the 19 neighborhoods identified in the opinionnaire map have been computed and are in the possession of the Trenton Public Schools. Because a detailed inter-neighborhood comparison reveals little of interest to the general reader, we present, instead, an illustrative comparison of the rankings by two predominantly white neighborhoods -- Chambersburg (C) and Lalor Tract (D) -- two predominantly non-white neighborhoods -- Battle Monument Area (K) and Spring-Passaic Area (L) -- and also a repeat of the response to the Spanish-language version. This comparison is not a definitive inter-racial comparison, but suggests what differences, if any, obtained among these cases.

Table II-13, thus, compares Neighborhoods C, D, K, L, and the Spanish results. According to our estimates, 26.6% of the white community members reside in C and D, and 19.6% of the black community resides in K or L. Less than 2% of the returns in our survey were on the Spanish version, while 4.7% of the Trenton population is reported to be Puerto Rican. Unless many Puerto Rican persons responded to the English-language version, we may assume that Puerto Ricans are under-represented in the overall sample.

TABLE II-13. COMPARISON OF EVALUATIVE RANKING FOR NEIGHBORHOODS C, D, K, L, AND SPANISH-LANGUAGE SAMPLE

	C Stanine	D Stanine	K Stanine	L Stanine	Spanish Stanine
Vocational Education	9	9	7	8	5
Evening High School	9	9	9	9	4
School Libraries	9	8	9	9	9
Learning Opportunities for Pre-School, Etc.	5	5	9	9	8
Adult Education	9	9	8	8	8
Teacher Ability	8	8	8	8	8
Math-Science Education	8	9	7	7	9
School Lunch Programs	6	5	9	8	9
Student Health Services	7	6	8	9	8
Recreation and Sports	8	8	8	7	6
Basic Skills Education	7	7	7	7	1
Percentage of Students Who Graduate	6	8	4	7	7
Citizenship and Social Studies Instruction	6	6	6	6	2
Reading and Language Arts	6	7	6	6	5
Learning Opportunities for Handicapped, Etc.	8	5	7	4	6
Preparation for College	7	7	2	6	7
Learning Opportunities for Disadvantaged, Etc.	7	6	5	4	8
Staff Attitudes	4	3	5	5	2
Extra Curricular Activities, Etc.	5	7	6	2	3
Student Preparation for Jobs	5	4	3	5	4
Books, Supplies, Etc.	4	4	4	5	7
Guidance and Counseling	4	4	3	4	6
Drug Education	4	3	5	5	7
Opportunity for Community Participation	3	3	5	6	2
Learning Opportunity for Spanish-Speaking, Etc.	5	6	6	3	9
Consumer Education	3	5	4	3	3
Sex and Family Education	2	3	3	4	5
School Buildings	3	2	3	3	3
Job Opportunity for Community, Etc.	2	4	2	3	x
Safety and Security	1	1	4	2	5
Attendance Levels	3	2	1	2	1
Communication with Parents, Etc.	2	2	2	2	3
Relations Among Students, Etc.	1	1	2	1	6
Class Size	2	2	1	1	1
Discipline	1	1	1	1	2
The Way District Uses Money	1	1	1	1	4

Results: Priority of Community Concerns

The five major concerns for Trenton residents, in order of priority are:

1. Safety and Crime
2. Taxes
3. Education
4. Housing
5. Employment

Most of the sub-populations in the group rank these items in the same order with the following exceptions:

1. Non-parents in the sample rank Employment higher than Education and Housing
2. Females in the sample rank Employment higher than Education and Housing
3. Persons in the 18-25 age group rank Education above Taxes
4. Persons 36-45 rank Housing Above Education

There is considerable variation across neighborhoods on the relative priorities. Table II-14 shows the priority rankings for the 19 neighborhoods, with 1 = highest priority and 5 = lowest priority.

TABLE II-14. COMPARISON OF PRIORITY CONCERN
RANKINGS, BY NEIGHBORHOOD

Neighborhood	Safety-Crime	Taxes	Education	Housing	Employment
A	1	3	5	2	4
B	1	2	5	3	4
C	1	2	3	5	4
D	1	2	3	4	5
E	1	2	3	4	(Environment = 5)
F	1	3	4	2	5
G	1	4	3	2	5
H	1	4	5	2	3
I	1	4	3	2	5
J	1	4	3	2	5
K	1	4	3	2	5
L	2	4	3	1	5
M	1	5	3	4	2
N	3	5	2	1	4
O	1	4	3	2	5
P	1	3	2	5	4
Q	1	2.5	2.5	-	4
R	1	3	2	3	4
S	1	2	3	4	5
General Population	1	2	3	4	5

- **INTERPRETATIONS AND RECOMMENDATIONS**

INTERPRETATIONS AND RECOMMENDATIONS

APPROACH TO INTERPRETATION

Now that a portion of the extensive statistical description of the survey results has been presented, it is wise to re-emphasize the reasons for the survey and uses to which inferences about the results should be put.

The survey is part of a long-range effort to develop and install regular goal-setting activities in the annual planning cycle of the Trenton Public Schools. The results of the survey are to serve as an indication to the policy-makers in TPS of the community's sentiment about the public schools, so that the district may select meaningful Indicators of Quality, with which to express quantifiable goals and objectives for the public schools.

In a sense, this community opinion study is a kind of "market analysis," in which the community is viewed as the client or market of the public schools; that is, the community "buys" or rejects the products of the district, as manifest in their financial and personal support of the district's programs and services. Thus, in choosing Indicators and objectives which require public support, in deciding which programs will be enhanced or curtailed, in evaluating the district's responsiveness to the community's desires and perceived needs--the results of this survey should prove a valuable resource to the policy-makers, an analysis more reliable than the vocal individuals and groups who now claim to know information which, in fact, could not be known without research of this type.

Of course, the scope of information provided is constrained by the data-gathering instrument itself; we know the answers only to those questions asked. Also, our knowledge is subject to the sampling errors and biases

reported earlier (racial bias is not one of them). At any rate, the interpretations and recommendations presented below, while imperfect, are based on more thorough community data than has ever previously been available to the Trenton Public Schools.

AREAS OF NEARLY TOTAL AGREEMENT

We must be careful in drawing certain conclusions from this data. While respondents were asked to rate thirty-six descriptors individually, we are mainly concerned with the relative rankings of those items, not the mean score for each item. (The "good-bad" scale is not well-enough defined to attach too much meaning to individual evaluations.) Further, we cannot be sure exactly what a respondent means when he says that "Basic Skills Education" is good, average, or bad. Does "good" mean "good enough?" Is "average" high enough?

Rather than interpret individual ratings, we attend to the relative ranking of the items, and particularly to those items which elicited the strongest positive or negative response (the first two and last two stanines). Our assertion is that, irrespective of the rankings assigned to these items, they are the ones that most persons feel strongly about--in comparison to the others; so that a school district's efforts to find goals and programs meaningful to the community should probably attend to those elements.

The general community is more consistent on the low end of the scale than on the middle or high end. For the total sample, and most sub-groups within the sample, the following items are the "least liked". (See Table II-15.)

TABLE II-15. WORST-RATED DESCRIPTORS OF THE TRENTON SCHOOLS

Bottom Stanine Items (Stanine 1 and 2)

- The Way the District Uses Money
- Discipline
- Class Size
- Relations Among Students with Different Racial or Cultural Backgrounds
- Communication with Parents and Community Members
- Attendance Levels
- Safety and Security
- Job Opportunities for Members of the Community

While inter-group consistency is poorer on the "best liked" items, the top two stanines for the total population are presented in Table II-16.

TABLE II-16. BEST RATED DESCRIPTORS OF THE
TRENTON PUBLIC SCHOOLS

Top Stanine Items (Stanine 9 and 8)

- Vocational Education
- Evening High School
- School Libraries
- Learning Opportunities for Pre-School Children
- Adult Education
- Teacher Ability
- Math-Science Education
- School Lunch Programs

Controversies across groups will be described on the following pages.

DIFFERING PERCEPTIONS OF GROUPS WITHIN THE SAMPLE

Teachers

The strongest opinion items for teachers in TPS (n = 270) differ somewhat from those of the general community. Included in the teachers' top-rated items are:

- Student Health Services
- Preparation for College.

Included in the teachers' lowest-rated items are:

- Learning Opportunities for Spanish-speaking Children
- Learning Opportunities for Handicapped Children
- Sex and Family Education.

Among the conflicts between the teachers' group and the general community are:

- Teachers rank the school lunch programs significantly lower than the community
- Teachers rank both opportunities for community participation and job opportunities significantly higher than the community
- Teachers rank opportunities for handicapped students much lower than the community does.

Spanish-Language Respondents

Because of the sample size and translation difficulties involved in the Spanish-language version, the results must be interpreted cautiously. Among

the conflicts between the general community and Spanish-language respondents are:

- The Spanish-language respondents have a significantly higher rating of Opportunities for Spanish-Speaking Children than the general community
- The Spanish-language respondents have a significantly lower rating for basic skills, citizenship, staff attitudes, and community participation than the general community.

Parents vs. Non-Parents

There is little conflict between parents and non-parents on the ratings, except that non-parents include Recreation and Sports in their highest-rated group, while rating Opportunities for Pre-school Children and Handicapped Children significantly lower than parents.

Parents (who dominate the sample) have preferences similar to the general public, but include School Buildings in their bottom two stanines.

Men vs. Women

Women dominate the overall sample and do not differ from the general rankings.

Men differ from the women and general community preferences in including Sports and Recreation in the top-rated group, as well as Student Health Services. Men do not rate School Buildings as low as the general community.

Age Differences

There are few age group differences in the item rankings. All but the 26-35 age group include Recreation and Sports in the top two stanines; the youngest

group (18-25) has a higher opinion of Consumer Education than any other age group or the general community.

Priority Differences

There are some disagreements between those persons who checked Education as a priority in Question #2 and those who did not. The top two and bottom two stanines for the "No Education Priority" group are identical with those of the general community. For those who did indicate the Education as a priority:

- Student Health Services are included in top, while Teacher Ability falls slightly below
- School Buildings is included in the bottom, while Job Opportunities is not.

Race-Neighborhood Differences

Certain conflicting evaluations that are probably associated with race can be observed in Table II-13. In the neighborhoods cited (Chambersburg and Lalor Tract versus Battle Monument and Spring-Passaic), the respondents in the predominantly white neighborhoods have a significantly lower rating of Opportunities for Pre-School Children and School Lunch Programs than respondents from predominantly non-white neighborhoods. Respondents from non-white communities rate Opportunities for Community Participation significantly higher than respondents from non-white neighborhoods.

Area K, Battle Monument Area, rates Percentage who Graduate and Preparation for College significantly lower than the predominantly white neighborhoods and other predominantly non-white neighborhoods.

Differences in Perceived Priorities

Conflicts in community priority concerns (answers to Question #2) show interesting variations among neighborhoods.

"Safety and Crime" is the first priority in all neighborhoods except Spring-Passaic and Mercer-Jackson, where it is usurped by Housing as a first priority. "Taxes" occupies differing priority positions, but never first priority. Education is never reported as first priority, and, in fact, appears in fifth position in 3 neighborhoods (see Table II-14).

While almost all neighborhoods (12 of 19) report "Safety and Crime" as top priority (as does the general sample), only Chambersburg (C) and Cadwalader (S) report the same top-five ranking as the general community.

CONCLUSIONS

Of the 36 descriptors in the opinion instrument, the following appear to be most salient in terms of the strength of negative or positive evaluations of them:

	Vocational Education
	Evening High School
	School Libraries
Best-	Opportunities for Pre-School Children
Rated	Adult Education
	Teacher Ability
	Math-Science Ed
	School Lunch Programs
	Student Health Services
	Recreation and Sports

	The Way the District Uses Money
	Discipline
	Class Size
Worst-	Relations Among Students of Different Backgrounds
Rated	Communication with Parents and Community
	Attendance Levels
	Safety and Security
	Job Opportunities for the Community
	School Buildings.

In addition, the following items, although they did not appear typically in the top and bottom stanines, also received more than an 80% response (any opinion between 1 and 5):

- Books, Supplies, Materials
- Guidance and Counseling
- Reading and Language Arts (See Table II-5).

Using these two criteria, strength of opinion and frequency of response, we generate the following pair of significant descriptors. The first table (Table II-17) shows those descriptors satisfying both criteria; the second table (Table II-18) shows those descriptors satisfying one of the two criteria.

TABLE II-17. MOST SIGNIFICANT DESCRIPTORS
(SATISFYING BOTH CRITERIA)

- School Lunch Programs
 - School Buildings
 - Job Opportunities for Community Members
 - Class Size
 - Discipline
 - School Libraries
 - Recreation and Sports
 - Communication with Parents and Community Members
 - Student Health Services
 - Teacher Ability
 - Relations Among Student of Different Backgrounds.
-

TABLE II-18. DESCRIPTORS OF SECONDARY SIGNIFICANCE
(SATISFYING ONE CRITERION)

- Vocational Education
 - Evening High School
 - Opportunities for Pre-School Children
 - Adult Education
 - Math-Science Ed.
 - The Way the District Uses Money
 - Attendance Levels
 - Safety and Security
 - Books, Supplies, Materials
 - Guidance and Counseling
 - Reading and Language Arts
-

By extracting from the most significant descriptors list those that ranked at the bottom of the evaluative ratings, we may conclude that: the areas of service and programming which, according to the community, are most in need of improvement and change are:

- School Buildings
- Job Opportunities for Community Members
- Class Size
- Discipline
- Communication with Parents and Community
- Relations Among Students with Different Racial and Cultural Backgrounds.

IMPLICATIONS FOR POLICY AND PLANNING

The immediate benefit of this analysis is that, given Table II-15 and II-16, the Trenton Public Schools now has a good reason to choose which of the many aspects of the programs it wishes to communicate most effectively to the public, and, in addition, which aspects generate most public dissatisfaction. Even given the contingencies of the instrument and sampling procedure, this interpretation is hard to challenge.

There are, however, some important problems for planning--choosing Indicators and setting goals--which are not yet entirely solved. First, the descriptors most important to the community are measures of process rather than measures of educational product or effectiveness. The community, it appears, is more concerned with the facilities and service structure of the schools than with the measures of educational performance--such as skill areas, job placement, college placement, etc. The community, of course, is entitled

to judge its schools in any way it wishes, but neither the community (nor most educators) has yet come to grips with the notion of educational productivity--an idea essential for rational resource allocation.

Another problem in the descriptors judged most significant is that neither the community nor the TPS has much hard, accessible data to evaluate the district's current performance on these dimensions. (Note, however, that the teachers' preceptions did not differ dramatically from the community's.)

The next activity, then, in installing STEP's goal-setting sub-system is to characterize the salient community descriptors in measurable form, Indicators of Quality, and wherever possible, to state them in product rather than process terms. Then, given a set of meaningful evaluative measures, the district can set out to assess its current effectiveness and set measurable goals for the future.

Candidate Indicators.

The following scales are proposed for TPS; each will need further clarification--partly as a function of the available data or the cost of generating new data.

The proposed Indicators are:

1. Index of Student Health and Nutrition (percentage of students satisfying health and nutrition standards)
2. Percentage of students in sub-standard or deteriorating facilities
3. Proportion of employee positions held by members of the community
4. Ratios of students to teachers
5. Incidence per thousand students of discipline referrals, suspensions, expulsions

6. Library holdings per student
7. Percentage of student time spend in recreation, sports, and physical education
8. Percentage of parents and community members who know certain facts about the TPS (ascertained by survey)
9. Accreditation, education, and experience levels of teachers
10. Incidence, per month, of conflicts between students of different racial or ethnic backgrounds
11. Percentage of students who graduate with a salable vocational skill
12. Percentage of drop-outs and other residents of the community enrolled in continuing educational programs
13. Percentage of students who enter first grade with acceptable readiness skills
14. Average performance of students on standardized measures of math-science ability
15. Average performance of students on standardized measures of reading-language arts ability
16. Average daily attendance
17. Incidence of harm or damage to students due to delinquent or criminal behavior
18. Expenditures for books, supplies, materials, etc./student
19. Percentage of students fulfilling post high school expectations
20. Drop-out rate
21. Level of cost-benefit or cost-utility of the district's budget.

FINAL COMMENT

This proposed list needs to be shortened, and the individual scales refined. We believe, however, that a set of Indicators of Quality that will be effective in communicating with the public can be extracted from the proposed set.